

()

-

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

هُوَ الَّذِي جَعَلَ الشَّمْسَ ضِيَاءً وَالْقَمَرَ نُورًا وَقَدَّرَهُ مَنَازِلَ لِتَعْلَمُوا

عَدَدَ السِّنِينَ وَالْحِسَابَ مَا خَلَقَ اللَّهُ ذَلِكَ إِلَّا بِالْحَقِّ يُفَصِّلُ

الْآيَاتِ لِقَوْمٍ يَعْلَمُونَ ﴿٥٠﴾

()

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

⋮

•
•
•
•

.

.

⤴ :

⤵ .

.()

:

.

.

:

.

.

:

.

. :

⋮

•

•



•



•

•

•

⋮



• ⋮

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

⋮)

⋮ .

(

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Richards, E.G., *Mapping Time Calendar and Its History*, Oxford University Press, New York, USA, p. .

Departemen Rukyat dan Hisab, *Kalendar Rukyat MABIMS* – , Departement Rukyat dan Hisab Indonesia, Jakarta, Indonesia, .

()

.()

"

"

"

" :

"

"

:

:

.(Crescent width)

.(Relative Azimuth)

.(Crescent Height)

.(Arc of Light)

.(Difference in ascension)

:)

:

(

) : (Fotheringham) -
(Schmidt) (Athens) -
: : -

Mohammad Yasin Owadally, *The Muslim Scientists*, A.S.Noordeen, Kuala Lumpur, Malaysia, p. .
:
:
:
: . . . (. . . :)

Baharruddin bin Zainal, *Kriteria Kenampakan Anak Bulan di Malaysia*, Kolej Ugama Sultan Zainal Abidin, Kuala Terengganu, Malaysia, p. .

: . . . : . . .

Mohammad Yasin Owadally, *The Muslim Scientists*, p.
B.R. Goldstein, *The Commentary of Ibn al-Mūthānnā to the astronomical tables of al-Khāwarizmī*, pp. - .

Dr Monzur Ahmad, *Documentation for Moon Calculator*, No publisher, Birmingham, UK, p.

.
Monzur Ahmad, *Documentation for Moon Calculator*, p. .

:(Royal Greenwich Observatory) -

[:] ()

Sun's geocentric)

(dip

: (MABIMS) -

: -

()

: -

Baharruddin bin Zainal, *Kriteria Kenampakan Anak Bulan di Malaysia*, p. .

Monzur Ahmad, *Documentation for Moon Calculator*, p. .

Baharruddin bin Zainal, *Kriteria Kenampakan Anak Bulan di Malaysia*, p. .

Baharruddin bin Zainal, *Kriteria Kenampakan Anak Bulan di Malaysia*, p. .
(ISNA)

www.moonsighting.com :

Leong Wen Xin, *Lunar Visibility and the Islamic Calendar, A project paper for Undergraduate Research Opportunity Programme in Science*, National University of Singapore, Singapore, , p. .

: -

Topocentric Crescent)

(Geocentric Relative Altitude)

(Width

: .

: .

: .

: .

: .

.

.

.

:

:

ﷺ ﷺ

:

.

ﷺ

ﷺ

"

.

.

ﷺ

.

.

.

.

" :
:

"

:

:

-

-

-

-

-

-

-

.

-

.

-

.

.

(Julius Ceaser)

Pope Gregory XIII)

(

"

"

:

-

-

-

-

-

"

"

"

"

:

.

.

.

.

:

.

.

.

:

.

:

.

.

.

.

.

:

.

" " " "

:

• *عبدالله*

:

(

(

(

(

"

"

"

"

"

"

:)

: :

(

:)

(

: .

(. . :)

.

" :

" ...

"

"

" :

" ...

"

"

"

" :

.

...

:)

:

(

(. . :)

:)

:

(

(:)

:



:

: . ()
: . :

):

۱۱۱۱
۱۱۱۱
۱۱۱۱

" : .
.(

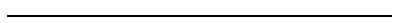
."

()

"

.
:

:



: .

:)

:

:)

(

(

:)

(

:

: .

.

.

"

":

"

":

):

.(

)

:

:

(

: . () : : ()

: .

" : ()

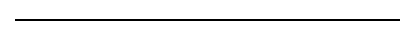
" : . "

"

" : ()

. ()

:



: . (:)

(:)

-

(- :)

:

()

"

"

() : " :

() " : ()

"

"

"

:)

:)

(

(

:

:)

(

()

" : ()

.

.

.

" :

.

()

.

()

" :

" :

"

.

.

.

:

:

.

-

:

:

)

(

)

" : (

" ()

"

: ()

()

" :

:

-

-

: .

:

:

.

.

:

:

.

:

.

.

-

:)

(

:

.

.

:

.

.

∴ .

∴ .

∴ . " .
" .

.

"

.

.

" :

.

()

.

:

.

.

:

.

.

:

"

.

. ()

()

: () " :



.

:

.

:

:

.

:

.

.

(. :)

:

•
•

:

: •

" :

"

۱۳۹۳
۲۰۱۴

"

:

()

•

•

:

()

: " :

"

(- . :)

-

:

• :

:)

:

(

:)

:)

(-

(-

()

"

()

" :

()

"

()

()

()

" :

"

(:)

:

()

:

(-)

(:)

:

()

:

:

(-)

()

"

"

"

"

()

)

": (

() ()

"

:)

(-

:)

(-

www.geocities.com/ibnyahya/ulama/albanna.html

:)

(.

" : ()

" : " ()

"

" : ()

"

" : () ()

:

:

:

(. . :) :

:

www.geocities.com/ibnyahya/ulama/hamka.html

:

:

:

Dr Abdul Malik bin Abdul Karim Amrullah, *Saya Kembali Ke Ru'yah*, Firma Islamiah, Medan, Indonesia, p. .

:

Burhan Che Daud, Najah Nadiyah Hj Amran, Syeikh Al-Marbawi, *Dewan Agama & Falsafah*, Jun , pp. - .

:

" :

" :

:

:

"

" :

" :

"

"

.

—

—

"

.

.

.

"

"

.

(- . :)

Al-Haj Sanusi bin Al-Haj Mahmud, *Kembali Kepada Rukyah*, Syarikat Dian, Kota Baharu, Malaysia, p .

.

:

" :

— —

:

:

.

اللهم صل على محمد

"

:

:

"

() () "

"

"

.

()

)

" : -

(

-

-

.
. .
. .

.

.

:

: .

:

.

. " .

. " :

) (

. " :

.

_____ :

- :

_____ :

(:)

-

∴ .

”

” ∴ ”

”

” ∴

.

”

”

”

” ∴

”

”

:)

(

. - ∴
. - ∴
. ∴

:

:

-

(

(

:

.

-

.

:

.

(- . :)

:)

(-

:



:

.

:

.

:

:

:

.

:

:

.

:

.

"
كلمة
الله
عز وجل

:

.

:



:

" : ()

"

.

()

.

.

.



(. . . . :)

.

()

"

" :

"

"

: .

()

: .

" :

"

()

()

" :

" :

"

" :

"

:

-

" : . ()

: . :

" : . "

"

()

" :

"

:

()

:

:

:

:

:

:

(

)

(

.

)

(

)

)

(

.

(

" "

" :

.

.

"

" :

()

.

"

:"

"

_____ :
.

: .

(. :)

www.geocities.com/ibnyahya/azhar/azhar.html

. -

."

" :

.

.

"

:

.

" :

.

:

()

.

.

.

.

.

.

"()

.

" :

.

.

.

."

.

" : .

"

.

:

" :

"

"

"

.

" :

-

"

.

. :
. :

:)

. (-

.

" :

"

" : 1979

"

" :

"

" :

:

:

.

.

.

"

.

:

:

" "

:

:

" : . : (

! " : . : " " : . : "

"

:

" " " " " "

۱۳۹۶

"

"

(. . :)

:) :

(.

۱۳۹۶

:

(

.

:

"

"

:

:

۱۳۹۶

.

.

.

"

"

"

"

"

"

:

:)

:

(

:)

:

(

:

" : ()

"

" : ()

:

"

()

" :

()

:

:

"

" :

()

:

:

:

.

:

.

:

.

.

"

:

(

)

.

.

"

.

"

:

(

.

.

"

.

"

.

.

.

• "

" :

• "

" :

•

•

"

()

•

:

•



:

"

: ﴿﴾ :

:

()

"

•



•

•

-

:

•

:

•

: ()

" : .

. :

) ()

. (

1993
1994
1995

. .

: " :

. " ()

1993
1994
1995

"

" : ()

"

1993

: . : :

1993

. : : .

. : 1993

. .

.

.

()

"

"

"

"

()

()

" :

" :

- -

-

-

-

"

" :

-

-

.

"

.

:

"

.

:

:

"

:

:

.

:

.

"

.

"

:

.

"

.

:

•

•

•

•

-

•

•

•

•

•

•

•

•
•
•
•



⋮
⋮

:

"

.

.

:

"

.

:

.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(

): بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

.

.

:

"

"

:

:

"

"

.

:

۵

.

.

,

:

.

.

.

.

.

-

.()

.

.

.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

.

.

.

.

.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

.

..

..

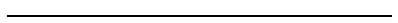
..

.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

.

.



.

.

:

.

.

.

.

.

.

:

:

.

.

.

.

۱۳۹۳
۱۳۹۳

:

.

.

. ()

.

.

.

:

۱۳۹۳
۱۳۹۳

:

.

"

"

:

.

.

۱۳۹۳
۱۳۹۳

" "

.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

() ()
()
()

Mohammad Yasin Owadally, *The Muslim Scientists*, p . :

Iyas, Mohammad, *Islamic Astronomy and Science Development, Glorious Past, Challenging Future*, Pelanduk Publications, Selangor, Kuala Lumpur, , p. .

.

()

:
:

.

.
.
.

:

.

-

.

.

.

:
:

:
.

()

.

.

:

()

.

·
·

()

() ()

·

()

()

()

·

()

·
·

·

·() ()

·
·
·

·

.

"

.

.

:

.

:

.

.

.

.

.

.

.

()

.

.

.

.

.

.

.

.()

:

.

.

.

.

-

.

.

.

.

.

.

)

(

.

.

.

.

:

.

)

.

.(

.

.

:

.

.

.

:

.

:

.

:

.

.

.

:

.

.

-

:

.

:

:

)

:

.

(

.



.

.

.

" :

"
ال
ص
ع
ع

! :

()

:

.

.

.

.

.

-

.

.

()

()

()

.(:)

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

”

”

”

”

-

.

.

.

.

.

.

.

.

.

.

.

.

.

.

(
(
(
(

:

:

:

:

.

-

-

.

.

.

.

.

:

.

.

-

.

.

.

(

)

.

.

.

//
//

//

//

-

:

:

-

-

-

-

-

-

:

-

-

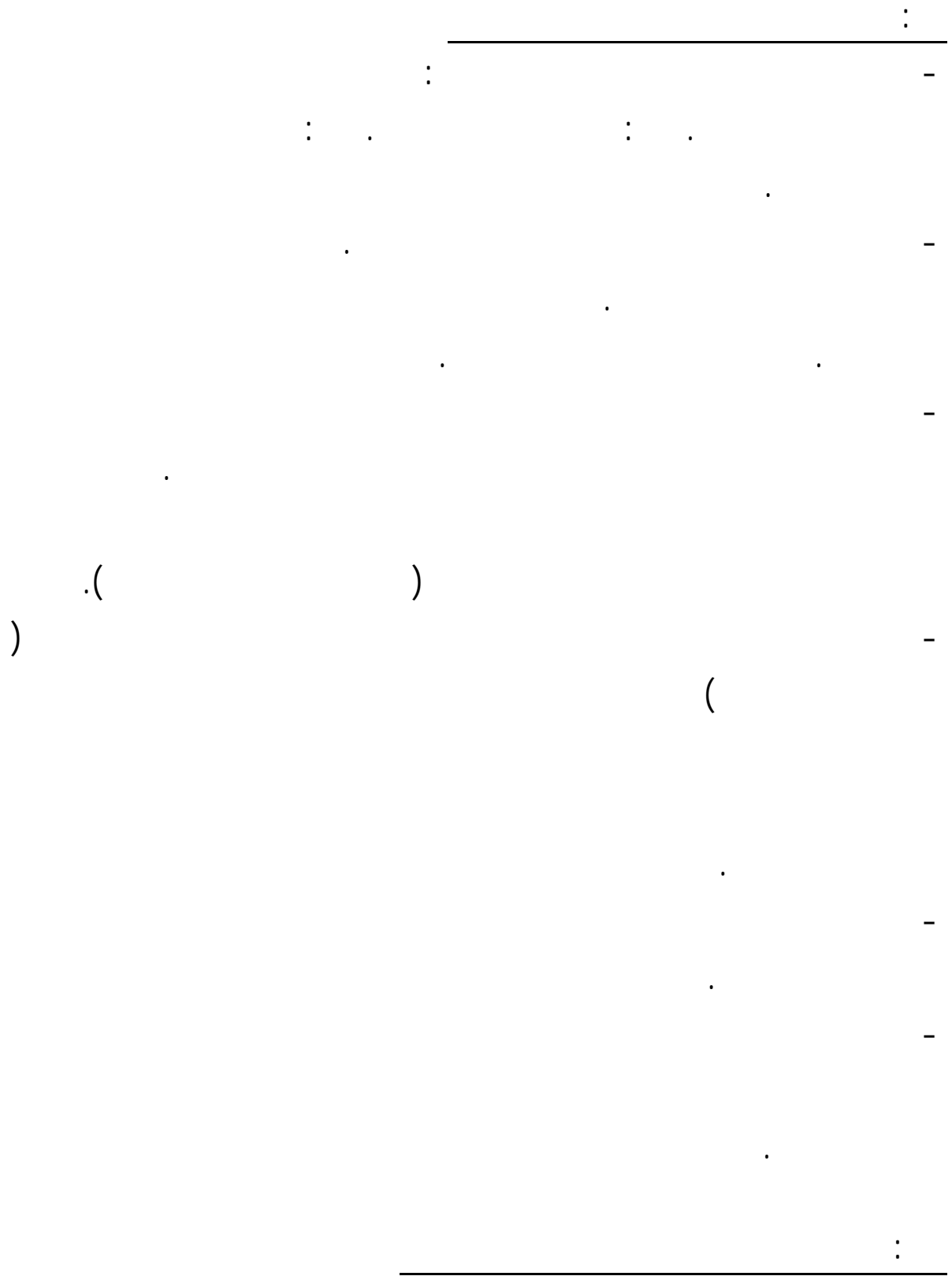
-

-

-

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



-

.

-

:

-

الله
الله

الله
الله

-

-

-

-

-

:

.

• • • • •

•

• • • • •

•

• • • • •

•

• • • • •

•

• • • • •

• • • • •

• • • • •

• • • • •

•

• • • • •

• • • • •

• • • • •

• • • • •

• • • • •

• • • • •

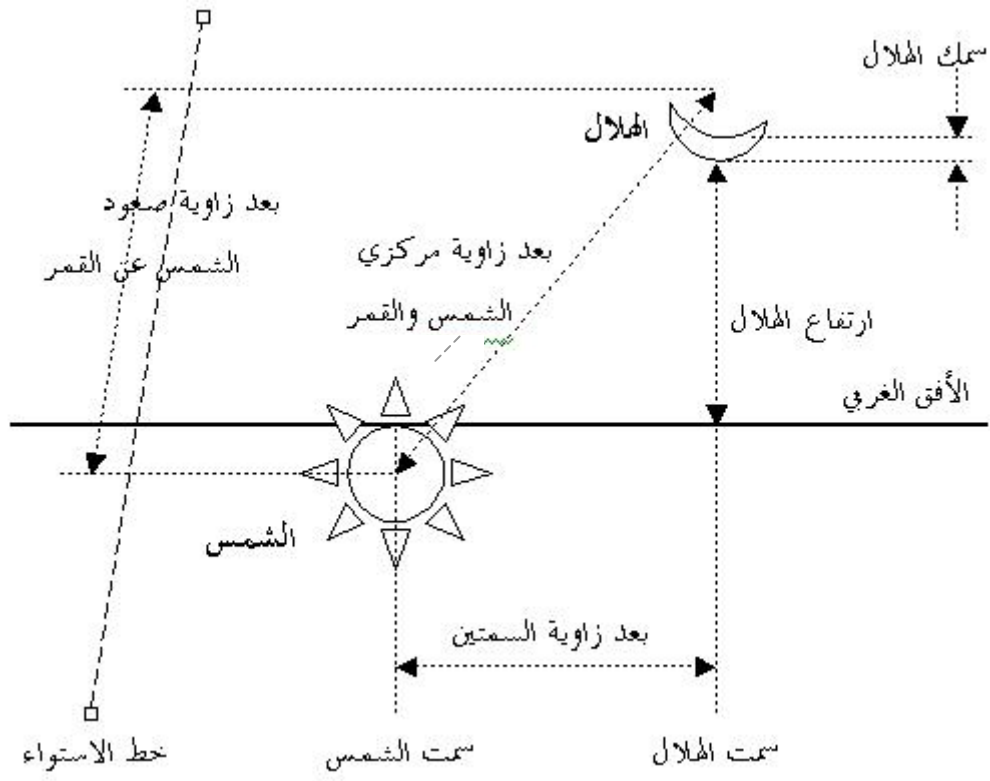
• • • • •

• • • • •

- . ----- . *Lunar Calendar Practices in Islamic, Chinese, Hindu and Other Civilizations. Proceedings of the International Conference on Lunar Calendar Practices. A Common Heritage in Islamic, Chinese, Hindu and Other Civilisations.* Penang: University of Science Malaysia.
- . -----, ---. *Penentuan Awal Bulan Hijrah Dan Arah Kiblat.* Kuala Lumpur: Jabatan Ukur & Pemetaan.
- . Abd. Karim Kassim S.H., ----. *Menentukan Awwal/Achir Puasa Ramadan dengan Ru'jat dan Hisab.* Bandung: P.T. AlMa'arif.
- . Abdul Hamid b. Mohd Tahir. . *Permasalahan dalam Penentuan Awal Puasa Dan Hari Raya. Pandangan Dari Sudut Hukum Syarak, Falak Syarii Dan Astronomi Moden.* Johor: Universiti Teknologi Malaysia.
- . Abdul Malik bin Abdul Karim Amrullah. . *Saya Kembali Ke Ru'yah.* Medan: Firma Islamiah.
- . Awang Haji Ismail bin Omar Abdul Aziz. . *Fatwa Mufti Kerajaan* - . Brunei: Jabatan Mufti Kerajaan.
- . Baharruddin bin Zainal. . *Kriteria Kenampakan Anak Bulan di Malaysia.* Terengganu: Kolej Uagama Sultan Zainal Abidin.
- . Baharrudin bin Zainal. . *Pengenalan Ilmu Falak.* Selangor: Percetakan Dewan Bahasa.
- . Burhan Che Daud & Najah Nadiah Hj Amran, . *Syeikh Al-Marbawi.* Dewan Agama & Falsafah. Jun.
- . Reingold, Edward M. & Nachum Dershowitz. . *Calenderical Calculations.* Cambridge: Cambridge University Press.
- . Farid Ruskanda. . *Masalah Hisab & Rukyat.* Jakarta: Gema Insani Press.
- . Goldstein, Bernard R.. . *The Commentary of Ibn al-Mūthānnā to the astronomical tables of al-Khāwarīzmī.* Ph.D thesis. Michigan: Brown University.
- . Kaler, James B.. . *The Ever-Changing Sky. A Guide to the Celestial Sphere.* Cambridge: Cambridge University Press.
- . Kunitzsch, Paul. . *The Arabs and the Stars.* Northampton: Variorum Reprints.
- . Leong Wen Xin. . *Lunar Visibility and the Islamic Calendar.* A project paper for Undergraduate Research Opportunity Programme in Science. Singapore: National University of Singapore.
- . Mohamad Ilyas & M.Khalid Taib. . *Pengantarabangsaan Kalendar Islam Perspektif Asia Pasifik.* Penang: University of Science Malaysia.
- . Mohammad Ilyas & M. M. Qurashi. . *New Moon's Visibility And International Islamic Calendar.* Penang: University of Science Malaysia.
- . Mohammad Ilyas. . *A Modern Guide To Astronomical Calculations of Islamic Calendar. Times & Qibla.* Kuala Lumpur: Berita Publishing.
- . Mohammad Ilyas. . *Astronomy of Islamic Calendar.* Kuala Lumpur: A.S.Noordeen.
- . Mohammad Ilyas. . *Calendar In Islamic Civilisation. Modern Issues.* Kuala Lumpur: Dewan Bahasa dan Pustaka.
- . Mohammad Ilyas. . *Islamic Astronomy And Science Development.* Selangor. Pelanduk Publication.

- . Mohammad Ilyas. . *The Quest For A Unified Islamic Calendar*. Penang: University of Science Malaysia.
- . Mohammad Yasin Owadally. . *The Muslim Scientists*. Kuala Lumpur: A.S.Noordeen.
- . Mohd Sanusi Haji Mahmood. . *Kembali Kepada Ru'yah*. Kelantan: Sharikat Dian.
- . Monzur Ahmad. . *Documentation for Moon Calculator*. Birmingham: No publisher.
- . Musa Mohamad. . *Towards Implementation of a Unified Islamic Calendar Policy Implications*. Penang: University of Science Malaysia.
- . Richards, E.G.. . *Mapping Time Calendar and Its History*. New York: Oxford University Press.
- . Saliba, George. . *A History of Arabic Astronomy*. New York: New York University Press.
- . Samsó, Julio. ١٩٩٤. *Islamic Astronomy and Medieval Spain*. Hampshire: Variorum.
- . Susiknan Azhari. . *Pembaharuan Pemikiran Hisab di Indonesia*. Yogyakarta: Pustaka Pelajar.

- <http://moonsighting.com/>
- http://isgkc.org/islamic_dates.htm
- <http://www.hilal-sighting.com/>
- <http://www.ibnyahya/>
- <http://www.geocities.com/ibnyahya/azhar>
- <http://www.jas.org.jo>
- <http://www.starlight.demon.co.uk>



.

.

.

.

.

.

.

.

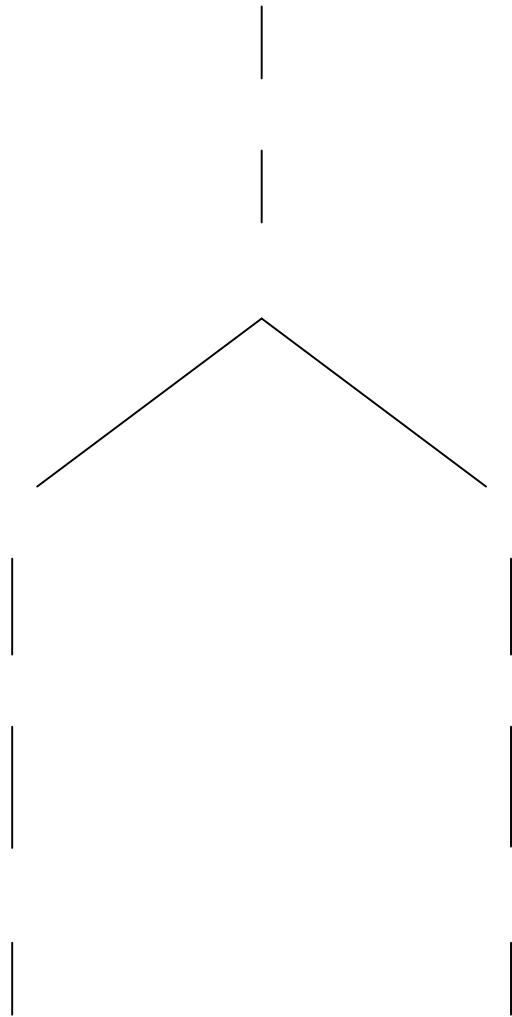
.

.

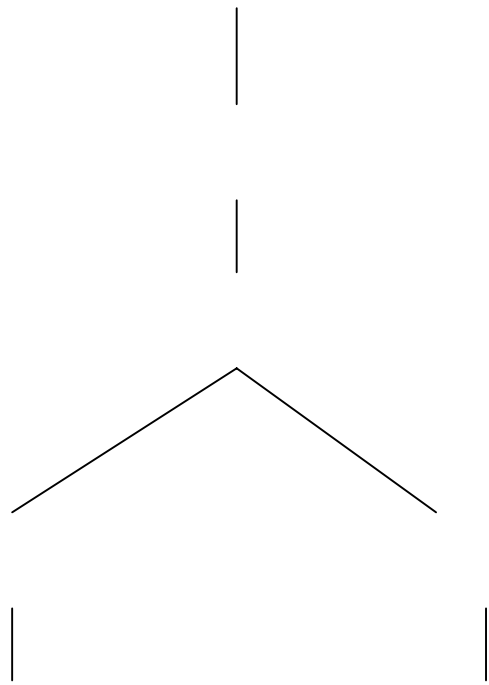
.

.

()



()



.()

.

.

.

.

Handwritten scribble

.

.

.

.

.

() .

.

.
"
"

.

:

.

.
.
.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

۱۳۹۳
۱۳۹۳

.

۱۳۹۳
۱۳۹۳

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

12
13
14

.

.

.

.